



SPARK GAP

Vol. 39, Issue 8, August 2022 *MARC - Serving Central Indiana Communities*

ON OUR MARC:

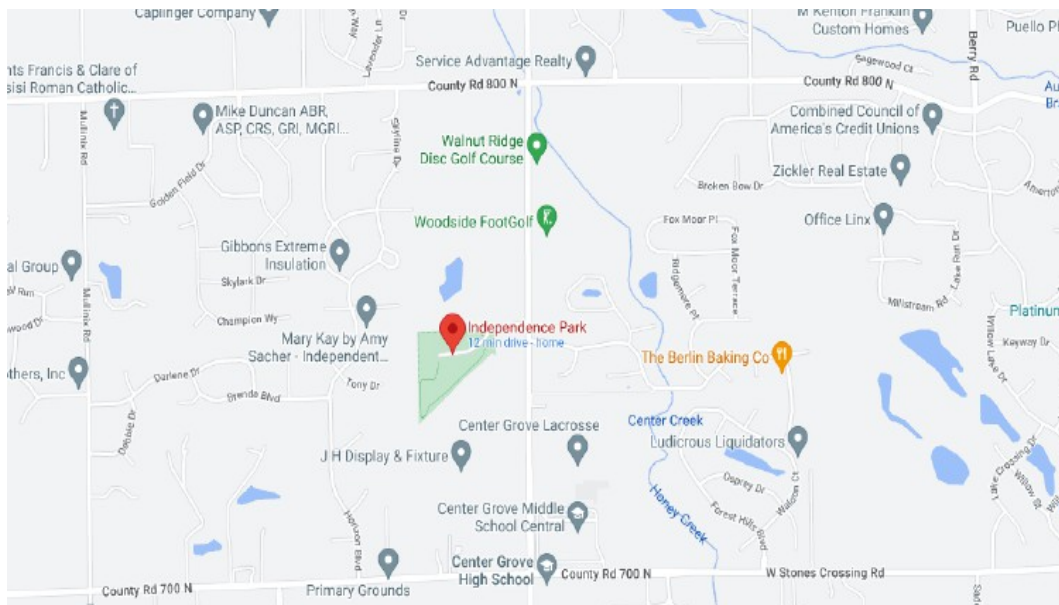
Our Mid-State Amateur Club monthly meeting will be held this Saturday, August 20, 2022 at 8 am at the Johnson County REMC Building, 750 International Dr. Franklin. Anyone wishing to run to become a MARC officer, be prepared to nominate/accept a nomination at this month's meeting. Hopefully, you have made your wishes known to the Election Committee, but you can nominate or self-nominate at the meeting if you wish.

Don't forget the 2nd annual MARC Tailgate Hamfest is coming up Saturday, September 10 at 1 Caisson Dr. Franklin, at 8 am. Contact PIO@midstatehams.org and/or Vicepresident@midstatehams.org for a sellers spot.

Our annual picnic will be held at Independence Park, Case Shelter on Saturday September 17. Keep the date on your calendar. The picnic is in lieu of our monthly meeting in September. More info will be sent next month.

See you Saturday!

TIM, WC9G





AUGUST BIRTHDAYS

N9IKL – DENNIS CIUREJ
W9WMS – Wm. (MARTY) JUSTIS
N9HDD – MARK SANDERS
N9CHY – CY YOUNG

August AuxComm Field Exercise

On Saturday, August 6, a group of MARC members interested in emergency communications and practice for emergency communications held a Field Exercise. The purpose was to see what HF frequencies, and at what power levels could be used for local communication during an emergency. There was a VHF Net Controller at the MARC Radio Room coordinating the exercise on VHF simplex. There was an HF Net Controller at the MARC Radio Room establishing contact with field and home teams of various HF bands. WinLink (email via radio) was also practiced by some operators. WinLink can be used on VHF (UHF also is possible) and HF bands.

Various mobile and/or portable setups were used in the field. The higher wavelength bands, (80m and 160m) surprisingly provided excellent contact between Net Control and one or more field teams, even at 5w via NVIS or ground wave. VHF simplex was used as the main communication/coordination, as all stations were able to communicate with Net Control on VHF Simplex. You never know what may work and what won't unless you practice and try it. In a disaster, we may be called upon to coordinate with another group on HF.

Thanks again to all who participated. It was a good learning experience.

73,

Tim

Ship Shape Hams Elmer Sea Cadets

Elmering a young amateur radio prospect is often on the minds of many club members. In July four MARC members took on the mission to demonstrate Amateur Radio to six Sea Cadets during a week-long camp out at Brown County State Park.

Heading up the effort was Kyle Burns, KB9KMB. He and fellow ham Jeremy Jukes, KD9TIP took their campers to the state park where they worked with the young Sea Cadets on Field Communications. The cadets are members of the United States Naval Sea Cadets Corp. They came from Indiana and surrounding states.



Kyle-KB9KMB & Noel-W9NMM prep Cadets for morning radio session.

According to Kyle, their first exercise was to erect tents, establish a camp and then erect a vertical mast with an 18-meter Spider pole with antenna on top. Kyle says the boys almost completed that mission of raising the mast together, running the coax and tying off rope guy lines when a bird hit the antenna and knocked it off the mast top. They had used Gorilla Tape to temporarily secure the antenna. It didn't survive the bird's attack.

The following day Noel-W9NMM and Jack-W8ISH demonstrated digital radio technology by sending WinLink messages from Jack's radio to Noel's radio across the camping area. This exercise showed how to send and receive messages during a disaster without Internet or WiFi.



Jack-W8ISH sets up computer, radio and batteries for field WinLink messaging demo.



Cadets raise Spider Pole



During the week-long exercise Cadets learned how to build a 2-meter Yagi antenna for fox hunting and how to solder wires.

Using his camper mounted HF radio Kyle later received text messages, to the boys, from their parents. He had instructed all the parents on how to send email to his Amateur Radio call sign using WinLink. Kyle said the cadets were impressed when they saw their names come up on the receiving screen.

Throughout the week Jeremy-KD9TIP demonstrated various antenna configurations and theory with the cadets. According to Kyle, "Throughout the training, cadets from Illinois, Indiana, and Ohio worked together to plan and execute operations



Jeremy-KD9TIP talks about WiresX to Sea Cadets

balancing concerns such as weight of carried gear, available power, and antenna effectiveness."



Jeremy demonstrates J-pole antenna

"The "Parks on the Air" program was used to provide a worldwide population of operators to attempt completing contacts with and by the end of the week the cadets collectively completed 253 contacts across 38 states, the District of Columbia, and Ontario, Canada," Kyle said.

Story by Jack W8ISH

Photos by W8ISH and KB9KMB

W9HR's Mobile Radio Install

For the past several years I've been using a temporary mobile setup in my Chevy Silverado truck. It consisted of a mag-mount dual band antenna, a dual band radio placed on the center console and powered through the cigarette outlet. I used a cup holder to hold the microphone. Obviously, this was not the best setup but it worked and got me through the SET exercises.

I thought, "When I grow up I want to have a professional looking and functioning mobile radio setup like the big guys and gals have." However, I procrastinated because the thought of drilling holes in my Silverado truck terrified me. Well, I've gotten over that and finally took action. Here is my story.

My criteria for installation was as follows:

- No drilling.
- Coax cable to run into the cab through a grommet. No kludgy "slammer" through the door.
- High mount so I don't have to fully take my eyes off the road to see the control unit.
- No interference with the existing AM/FM radio controls, heater/AC, etc.
- Nice looking install I can be proud of.

After some extensive research and discussion with several of my knowledgeable HAM buddies, I came up with a feasible design and the following Bill of Materials:

- Yaesu FTM-300 mobile radio.
- Diamond NR770 NMO mount antenna.
- Comet CP-5NMO lip mount antenna bracket.
- Rain cap for NMO mount. (For car wash and low overhead parking garages.)
- Extension speaker.
- 3 foot microphone extension cable.
- ProClip Silverado dash mount adapter.
- Lido radio mount with integrated microphone holder.
- 2 waterproof shrink ring terminals for battery connection.
- Several 3M adhesive cable clips.
- 3M double sided tape for mounting extension speaker.
- Small acrylic kitchen cutting board for mounting the radio.
- 4 adhesive rubber feet for cutting board mount.
- Odds and ends bolts and screws.

I started by mounting the lip antenna mount on the left side of my hood. I then ran the coax across the engine compartment and through a "punch out" grommet located below one of the passenger side door hinges. I taped the end of the coax to a snake and got it into the cab under the dashboard. I ran it under the passenger side floor mat and under the seat. I later zip tied the coax under the hood to a wire bundle that ran across the engine compartment. It was neat and secure.





I then crimped on a couple of ring terminals to the cable leads that came with the radio. I snaked the two cables through the same grommet and into the area below the passenger side dashboard. I had to snake each cable individually because the fuse holders were a bit bulky and the grommet size was limited. I ran the two cables under the floor mat and passenger seat.

The next step was to secure the remote control head and microphone to the dashboard. I used a Pro-Clip that was specifically designed for my vehicle. It snapped onto the trim above the radio LCD. It was bit challenging to get it on but my terror subsided once it snapped in and I didn't break any of the trim. Oh what a relief that was. Anyway, it provided a good mounting platform for the radio.

I mounted the radio remote control to the Lido mount with the single screw that comes with it. The microphone holder was already mounted on the Lido. I then mounted the assembly to the ProClip and it felt secure and well placed. I have to admit I had to do some drilling and bolting prior to mounting both the ProClip and the Lido mount. I could access all of the existing AM/FM radio controls without interference from the mobile radio. Nice. I starting to feel really good at this point.



I was going to use a hook and loop tape to secure the radio to the carpet under the passenger side. There was only one problem with that. There's no carpet under there – just a rubber mat material. Hmm, what to do? So, I mounted the radio on an old kitchen cutting board and used four adhesive feet – ala stereo speaker cabinets -- and stuck them to the bottom corners of the cutting board to keep it from sliding

around. It also keeps the radio up off the floor about ½ inch in case any puddling occurs in the snowy winter months.

I am almost home free at this point. I ran the remote control cable back to the radio and secured it with adhesive clips. I used a microphone extension cable and ran that back to the radio. I used some 3M double sided adhesive tape to secure the extension speaker to the lower console where I could hear it clearly. Finally, I connected the power cable terminals to the truck battery and, voila everything worked.

At a later time I intend to add in-line Powerpole connectors to the power cables so I can power the radio with a separate battery when the engine is not running.



Well, that's about it. I took some risks but won. I satisfied all of my criteria for the install. My blood pressure is good. I am now fully mobile with a descent radio setup. I hope to speak with you on the open road.

If you have questions or comments, I can be reached at W9HR@outlook.com

-Doug W9HR

Operators Support American Red Cross in Kentucky Flood Response

As the flood waters began to recede following devastating rainfall in Kentucky that began on July 26, the American Red Cross reported that over 400 of their disaster workers were on the ground, as well as dozens more in other locations. They provided shelter, meals, and other forms of support. Red Cross teams also worked alongside their state and municipal partners among others, including Kentucky ARES volunteers.

ARRL Director of Emergency Management Josh Johnston, KE5MHV, was in touch with American Red Cross personnel in the affected area. He said ham radio volunteers were supporting Red Cross damage assessment teams with radio communications. "The rural and mountainous terrain of the affected area adds to the already difficult situation," said Johnston.

Much of the local response effort is being coordinated by Steve Morgan, W4NHO, of Owensboro, Kentucky. The response of radio amateurs throughout the region is under and in cooperation with an existing Memorandum of Understanding (MOU) with the Kentucky Chapter of the American Red Cross. ARES groups from Ohio and Virginia have also been in touch with hams in the affected areas and have been on standby, ready to respond if needed. -

ARRL Letter ,,, August 2022

INDIANA HAMFESTS

August 13, 2022

Hendricks Co. Tailgate

Avon United Methodist Church

6550 E US 36 Avon, IN

August 13, 2022

Auburn Hamfest

Auburn Cord Duesenberg Museum

9 am – 1 pm

1600 Wayne Street Auburn, IN

September 10, 2022

MARC Tailgate (Free)

8am to 12pm

1 Caisson Drive Franklin, IN <http://www.midstatehams.org>

October 8, 2022

Hoosier Hills Hamfest

8 am

Lawrence Co Fairgrounds

11265 US-50 Bedford, IN

www.w9qyq.org

October 15, 2022

TARS - Octoberfest

7 am - 2 pm

Lynnville Community Center

416 W ST RD 68 Lynnville, IN



MID-STATE AMATEUR RADIO CLUB

The Mid-State Amateur Radio Club meets the **THIRD SATURDAY** of each month at the Johnson County REMC building 750 International Dr. Franklin, IN 46131

See our website, www.midstatehams.org, for maps on how to get to our meeting.

Everyone is welcome; you do not have to be a *HAM* to attend our meetings or a member of the club.

W9MID Repeater:

146.835/
146.235 MHz
(151.4 Hz PL Tone)

Club Officers:

President: Tim Aldridge - WC9G
Vice President: Rhonda Curtis - WS9H
Secretary: Jim Adams – KB9JMU
Treasurer: Jacki Frederick - KI6QOG
Repeater Trustee - Chris Frederick – KQ9Y

W9MID Repeater:

443.525/
448.525 MHz
(151.4 Hz PL Tone) YEASU SYSTEM FUSION (C4FM)

Weekly Net: Sunday evening 7:00 PM ARES/RACES members and ALL RADIO AMATEURS
146.835/146.235 MHz (151.4 Hz PL Tone)

The Official Newsletter of the Mid-State Amateur Radio Club

P.O. Box 836
Franklin, Indiana
46131

Spark Gap Editor: Robert LaGrange N9SIU

Please send your articles to my email: n9siu@yahoo.com no later than the 2nd week of the month.



Thanks to Johnson Co. REMC for the use of their building for meetings and testing.